

APPARATUS AND METHOD FOR SYNCHRONIZING CLOCK MODULATION WITH POWER SUPPLY MODULATION IN A SPREAD SPECTRUM CLOCK SYSTEM

ABSTRACT OF THE DISCLOSURE

A spread spectrum clock system (11) modulates the supply voltage for a circuit (10) in concert with the circuit clock frequency (C). The system increases the supply voltage for the circuit (10) in phase with increases in the circuit clock frequency (C). However, in the portion of the clock frequency modulation period in which the clock frequency (C) is decreasing, the system (11) also decreases the supply voltage for the circuit (10). This relationship between the circuit supply voltage and circuit clock frequency (C) may be accomplished by modulating the output (18) of a power supply (15) for the circuit (10) and applying that modulated supply voltage signal through a signal translator (30) to control modulation of a clock source (14).